

REMARKS

Reconsideration of the present application is requested. Claims 1-43 are currently pending, with claims 1, 12 and 13 being independent. Claims 1, 12 and 13 have been amended.

WITHDRAWAL OF PREVIOUS REJECTIONS

Applicants acknowledge the withdrawal of the previous rejection of claim 13 under 35 U.S.C. § 101, and the withdrawal of the previous rejections of claims 1, 12 and 13 under 35 U.S.C. § 103(a).

REJECTION UNDER 35 U.S.C. § 112, First Paragraph

The Examiner rejects claims 1, 12 and 13 under 35 U.S.C. § 112, First Paragraph as failing to comply with the written description requirement. Particularly, the Examiner contends the recitation of "the required function is optimized with regard to its parameters and afterwards an influence of the setting constants during simulation is taken into account separately from the optimization," as recited in claim 1, and somewhat similarly in claims 12 and 13, is not described in the specification. Applicants traverse this rejection.

Claim 1 is directed to a method for simulating a technical system. According to claim 1, a result in the form of an influence of parameters on the technical system is determined as a function of a set of parameters and based on a request to an external source. The result is temporarily stored. The technical system is then simulated based on the result and the setting constants.

In the method of claim 1, the parameters are optimized for a required function, wherein the required function depends on the parameters for configuration or reaction of the technical system and further depends on setting constants, which are static during optimization. Additionally, the required function is optimized with regard to its parameters, and an influence of the setting constants is taken into account separately from the optimization during simulation. Thus, as set forth in claim 1, the required function includes parameters and setting constants, and the technical system is simulated based on the result and the setting constants.

Initially, Applicants refer the Examiner to paragraph [0008] of the Substitute Specification, which states in part, "the required function can be split into determination of the influence of the parameters on the technical system and determination of the influence of the setting constants on the technical system."

Furthermore, an example embodiment concerning setting constants and parameters is disclosed in FIG 1 and the corresponding discussion set forth in paragraphs [0021-0023] of the Substitute Specification. FIG. 1 shows a method for simulation of a technical system. As shown, a required function evaluation 102 may depend on results from external sources. One example of an external source is an external simulator 106, which is linked via a "power station link" interface 105. The required function evaluation 102 may further depend on setting constants (e.g., case cost constants 103) resulting in the following relationship:

$$f_{\alpha,\beta,\dots}(\mathbf{x}) = F_{\alpha,\beta,\dots} \circ \underbrace{\phi(\mathbf{x})}_{\mathbf{y} \in \mathbb{R}^{n+m}}, \mathbf{x} \in \mathbb{R}^n. \quad (1)$$

In the above equation 1, f denotes the required function, which depends on the setting constants α, β, \dots and is split into a component F and a component ϕ . The component F includes setting constants, and the component ϕ comprises parameters $\mathbf{x} = (x_1, x_2, \dots, x_n)^T$, which may be influenced during the course of the optimization process. The character "O" in denotes that two functions are carried out successively.

Given the aforementioned discussion and support, the "required function is optimized with regard to its parameters and afterwards an influence of the setting constants during simulation is taken into account separately from the optimization," limitation is clearly and sufficiently disclosed in the specification so as to comply with 35 U.S.C. § 112, first Paragraph. Therefore, withdrawal of this rejection is requested.

REJECTION UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

The Examiner rejects claims 1-43 under 35 U.S.C. § 112, Second Paragraph as being indefinite. Although Applicants do not necessarily agree with the Examiner, Applicants have amended claims 1, 12 and 13 taking into account the Examiner's comments. Withdrawal of this rejection is requested.

CONCLUSION

In view of above remarks, reconsideration of the outstanding rejection and allowance of the pending claims is respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Andrew M. Waxman at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By


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